

Protected Area Downgrading, Downsizing, and Degazettement (PADDD) in Brazil and its impacts on deforestation in the Amazon

Anna Carolina Lobo
WWF - Brazil

IUCN World Parks Congress
November, 2014

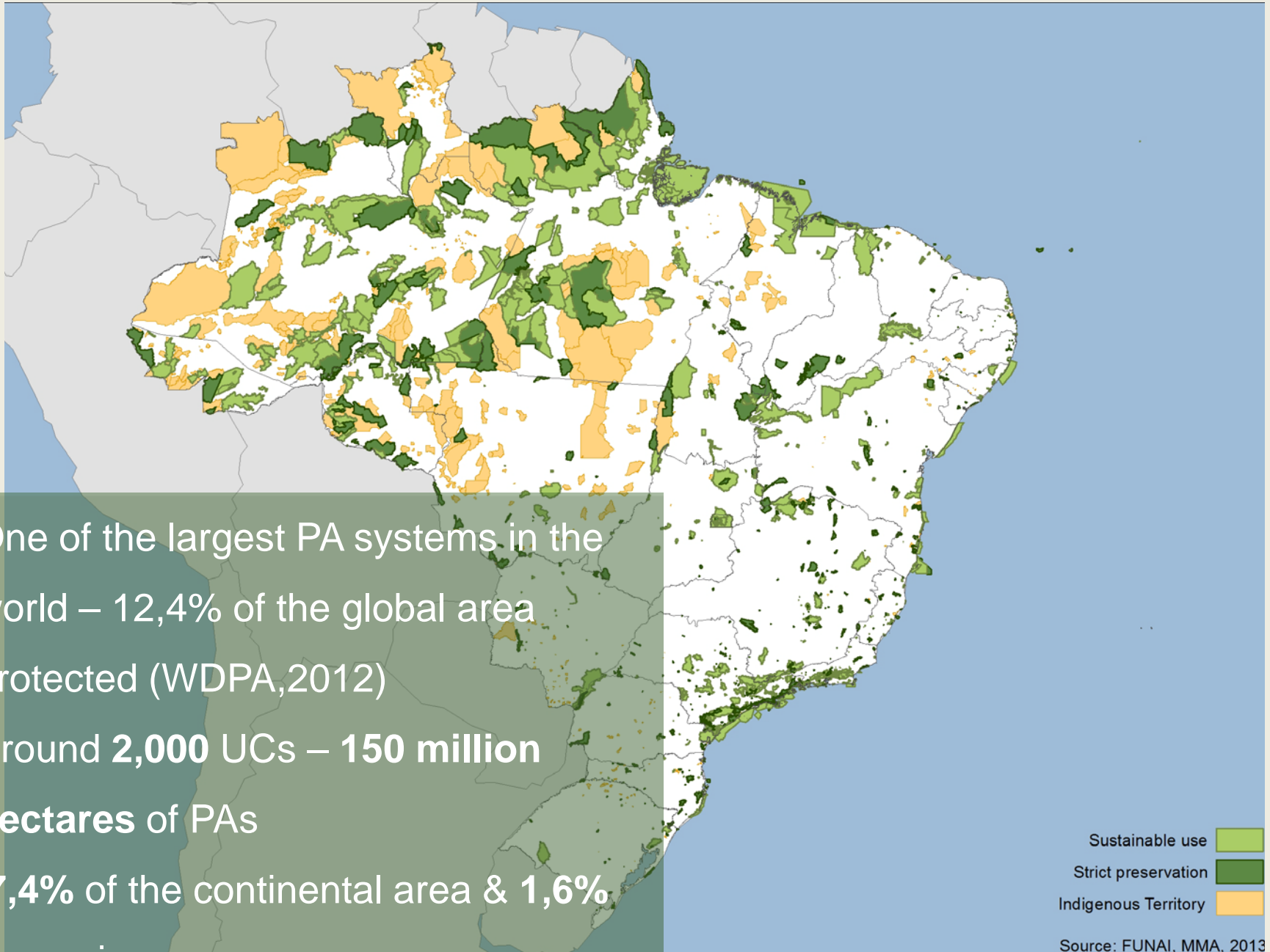


Preliminary results




**Partnership between WWF-Brazil, WWF-US,
University of Maryland & University of Pernambuco**



**Shalynn Pack, Mariana Ferreira, Roppa
Krithivasan, Jennifer Murrow, Michael Mascia,
and Enrico Bernard**



- ✓ One of the largest PA systems in the world – 12,4% of the global area protected (WDPA,2012)
- ✓ Around **2,000 UCs** – **150 million hectares** of PAs
- ✓ **17,4%** of the continental area & **1,6%** of the marine area

Sustainable use 
Strict preservation 
Indigenous Territory 

Source: FUNAI, MMA, 2013



PADDD in Brazil

- Bernard et al., 2014 *Conservation Biology*
- 93 protected areas suffered PADDD in Brazil since 1981
- Most of the events (74% of the total) occurred between 2008 and 2012
- 5.2 million hectares of PAs were lost

Conservation Biology

Essay

Downgrading, Downsizing, Degazettement, and Reclassification of Protected Areas in Brazil

E. BERNARD,* L. A. O. PENNA,* AND E. ARAÚJO†

*Laboratório de Ciência Aplicada à Conservação da Biodiversidade–Departamento de Zoologia, Universidade Federal de Pernambuco, Rua Nelson Chaves s/n Cidade Universitária, Recife, PE 50670-420, Brazil, email enrico.bernard@ufpe.br

†Instituto do Homem e Meio Ambiente da Amazônia-IMAIZON, Rua Domingos Marreiros, 2020, Belém, PA 66060-160, Brazil

Abstract: Protected areas (PAs) are key elements for biodiversity conservation and ecosystem services. Brazil has the largest PA system in the world, covering approximately 220 million ha. This system expanded rapidly in the mid-1990s to the mid-2000s. Recent events in Brazil, however, have led to an increase in PA downgrading, downsizing, and degazettement (PADDD). Does this reflect a shift in the country's PA policy? We analyzed the occurrence, frequency, magnitude, type, spatial distribution, and causes of changes in PA boundaries and categories in Brazil. We identified 93 PADDD events from 1981 to 2012. Such events increased in frequency since 2008 and were ascribed primarily to generation and transmission of electricity in Amazonia. In Brazilian parks and reserves, 7.3 million ha were affected by PADDD events, and of these, 5.2 million ha were affected by downsizing or degazetting. Moreover, projects being considered by the Federal Congress may degazette 2.1 million ha of PA in Amazonia alone. Relaxing the protection status of existing PAs is proving to be politically easy in Brazil, and the recent increase in frequency and extension of PADDD reflects a change in governmental policy. By taking advantage of chronic deficiencies in financial and personnel resources and surveillance, disputes over land tenure, and the slowness of the Brazilian justice, government agencies have been implementing PADDD without consultation of civil society. If parks and reserves are to maintain their integrity, there will need to be investments in Brazilian PAs and a better understanding of the benefits PAs



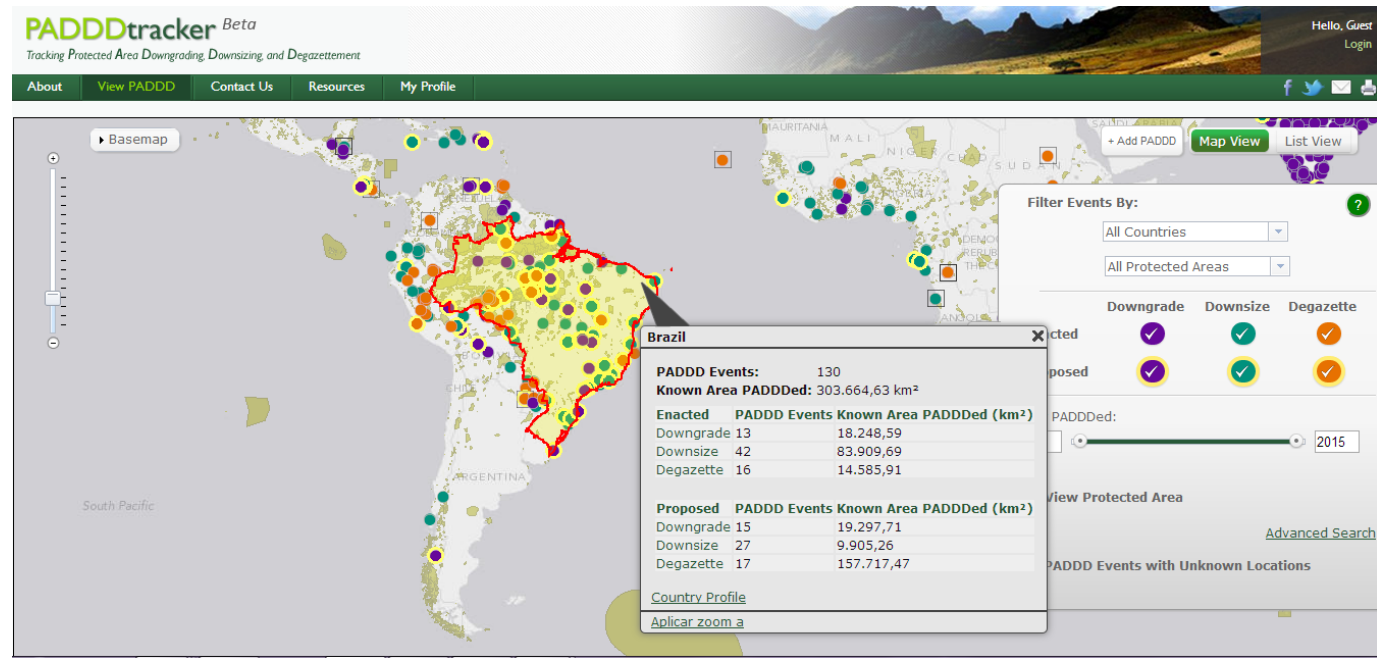
How have legal changes altered Brazil's protected areas?





Methods

- Created database of all PADD in Brazil
 - 20 variables for each event
- Mapped spatial extent of all PADD in the Amazon
- Uploaded all data to *www.PADDTracker.org*





Results

There were 41 cases of PADD in the Amazon – nearly one third of all the Brazilian cases – from 1988 to 2014

Rural settlements

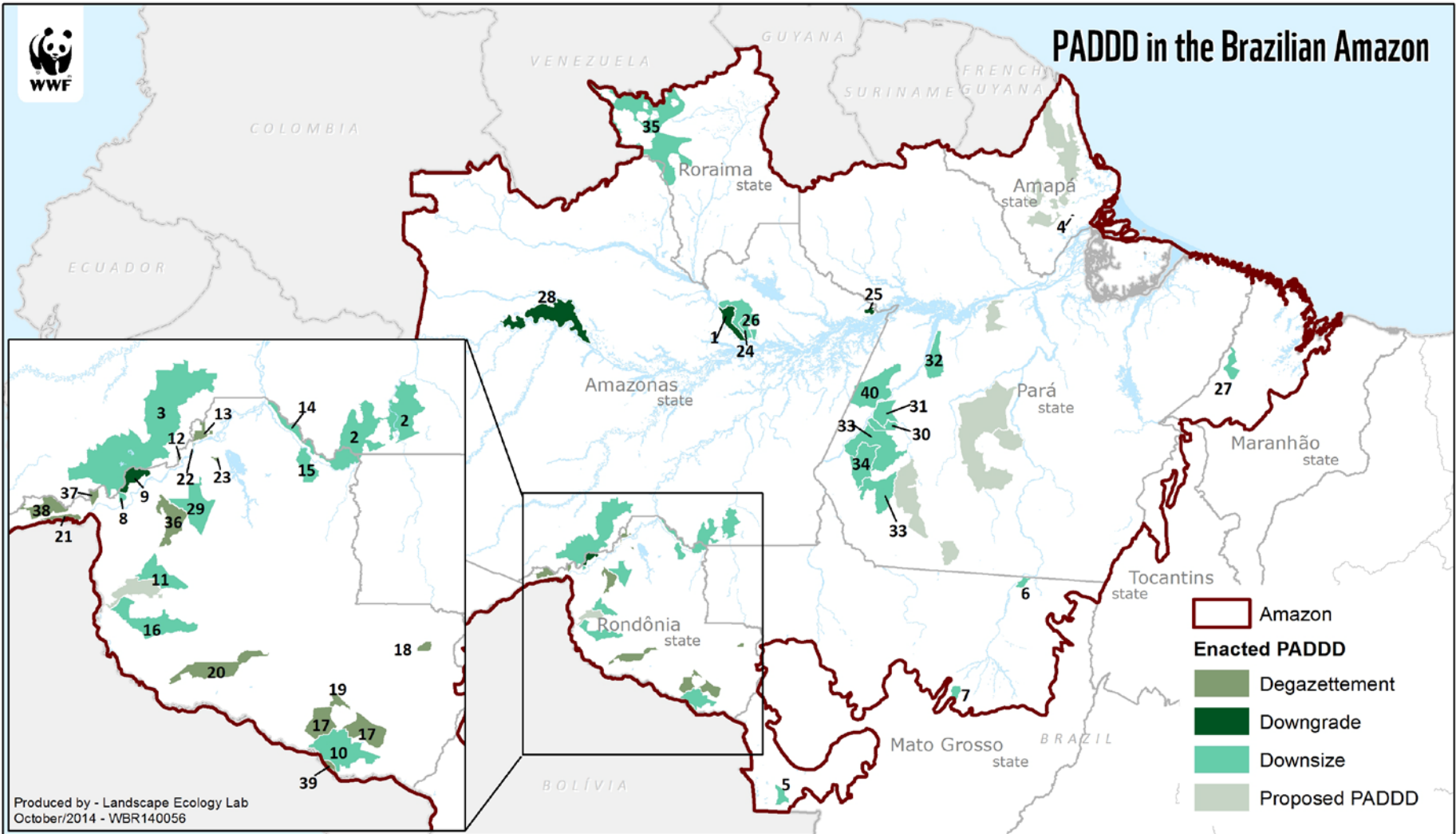


Hydropower development





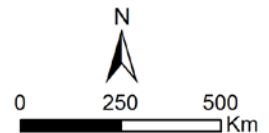
PADD in the Brazilian Amazon



Produced by - Landscape Ecology Lab
October/2014 - WBR140056

- | | | | | |
|-------------------------------|--------------------------------|-------------------------------|--------------------------|-------------------------------|
| 1 - PN de Anavilhanas | 9 - ESEC Serra dos Três Irmãos | 17 - FLORSU Rio Mequéns | 25 - PE Nhamundá | 33 - APA Tapajós |
| 2 - PN dos Campos Amazônicos | 10 - PE Corumbiara | 18 - FLORSU Rio Roosevelt | 26 - APA ME do Rio Negro | 34 - FLONA Crepori |
| 3 - PN Matinguari | 11 - PE Guajará Mirim | 19 - PE Serra dos Parecis | 27 - FLONA de Crepori* | 35 - FLONA Roraima |
| 4 - RPPN Seringal Triunfo | 12 - FLORSU Rio Vermelho C | 20 - FLORSU Rio São Domingos | 28 - RDS Mamirauá | 36 - RE Ex. Jaci-Paraná |
| 5 - PE Serra de Santa Bárbara | 13 - FLORSU Rio Madeira B | 21 - FLORSU Rio Abunã | 29 - FLONA Bom Futuro | 37 - FLORSU do Rio Vermelho B |
| 6 - PE Xingu | 14 - FLORSU Rio Machado | 22 - APA Rio Madeira | 30 - FLONA Itaituba I | 38 - RE do Rio Vermelho (D) |
| 7 - ESEC Rio Ronuro | 15 - RESEX Rio Preto/Jacundá | 23 - PE Candeias | 31 - FLONA Itaituba II | 39 - FLOREX de Laranjeiras |
| 8 - ESEC Antônio Mujica Nava | 16 - RESEX Rio Pacaás Novos | 24 - PE Rio Negro - Setor Sul | 32 - FLONA Tapajós | 40 - PN da Amazônia |

* Protected area have another classification - 'Proposed/Degazettement'.





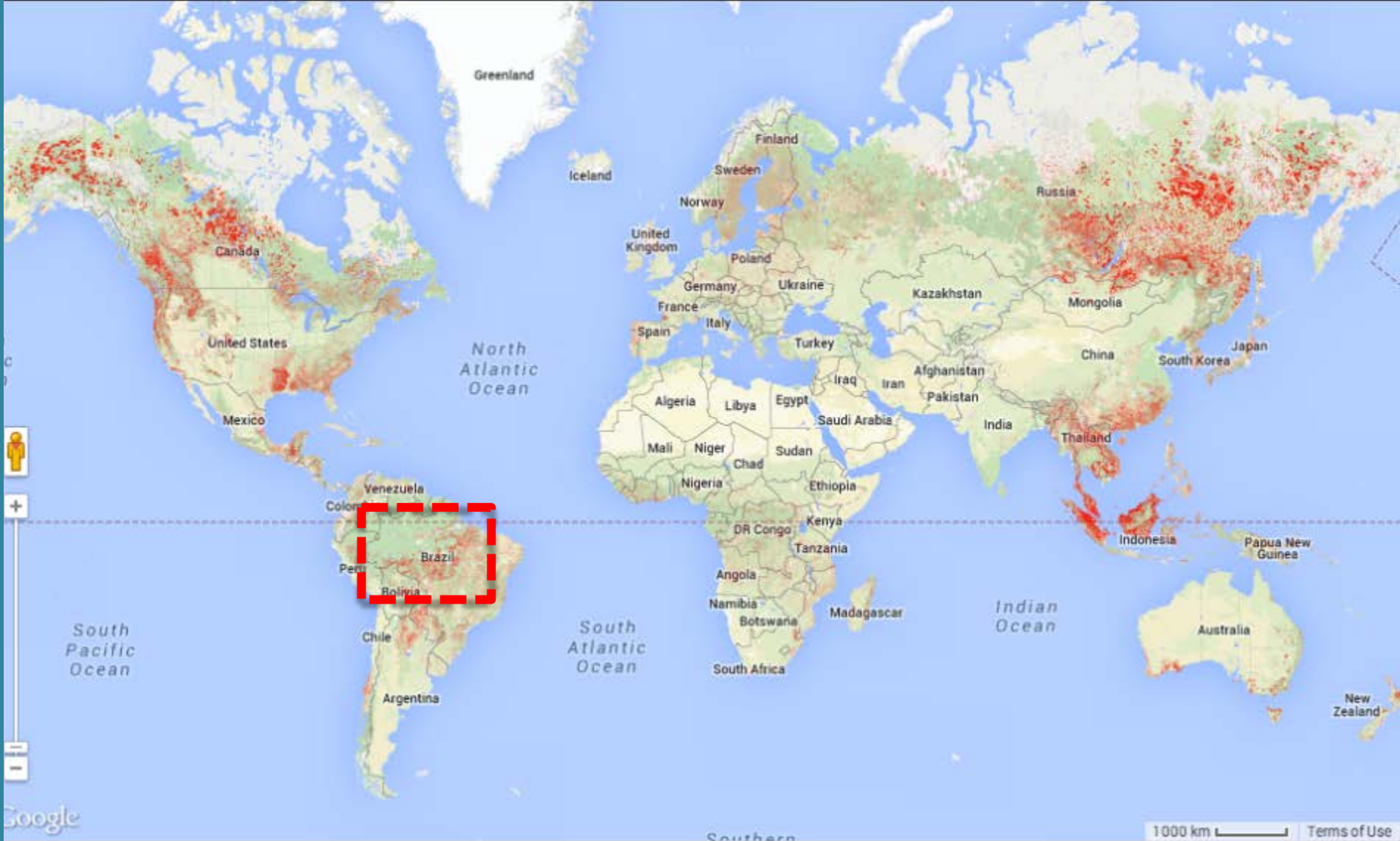
Does PADDD impacted deforestation in Brazil?





Deforestation 2000-2012

(Hansen et al. 2014)

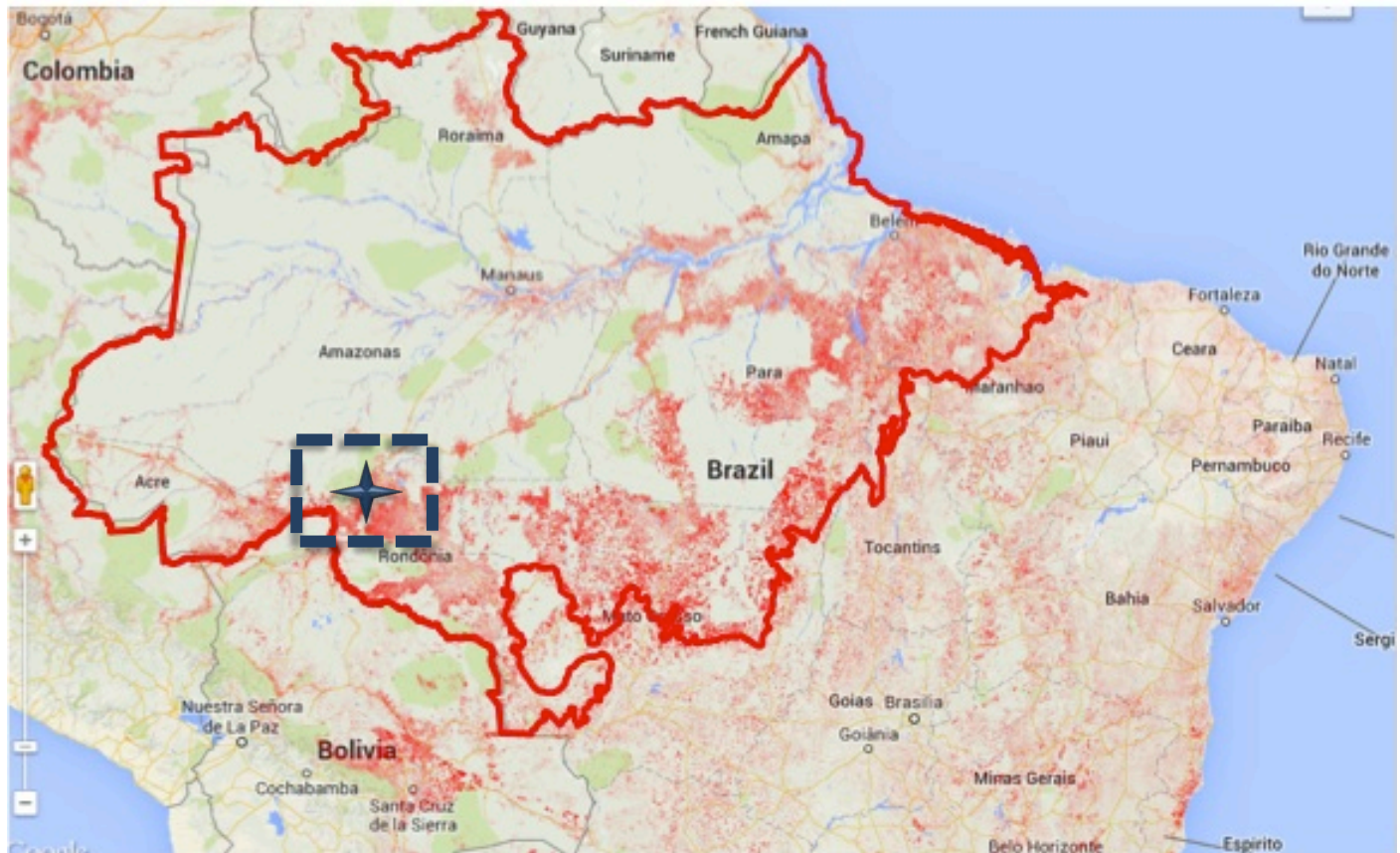


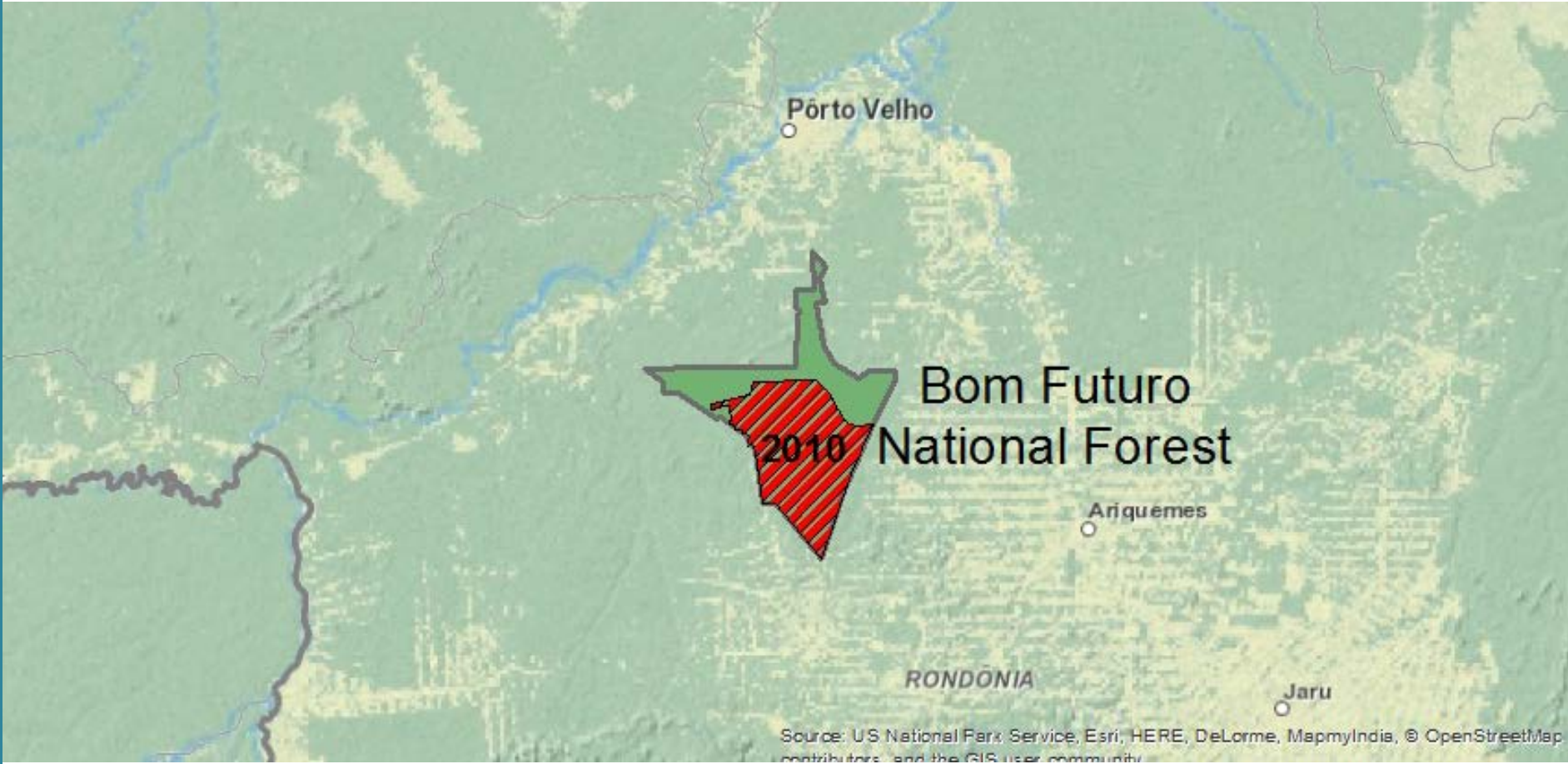


Compared deforestation among 3 land types

PADDed, protected, & never-protected

Ex. Bom Futuro National Forest





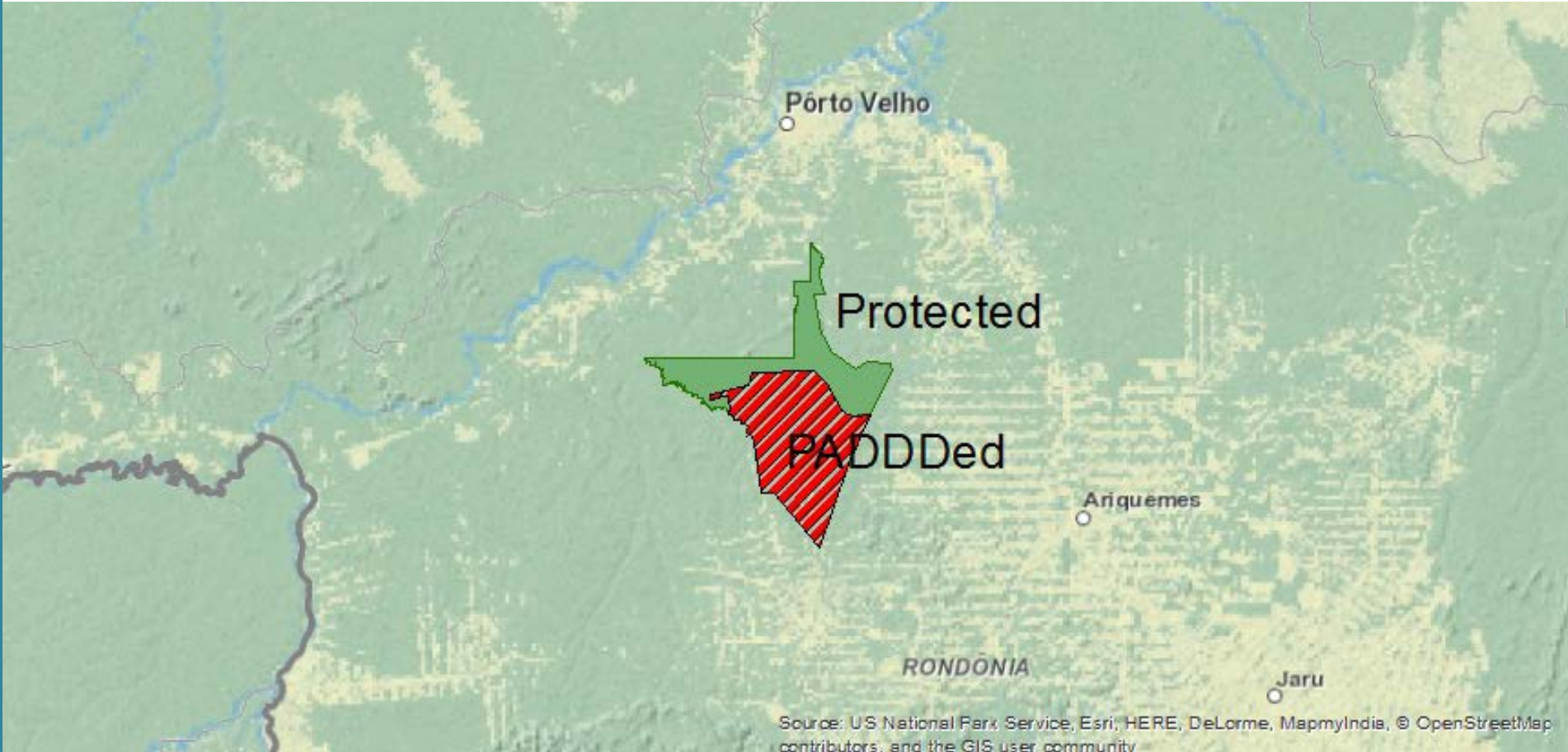
Source: US National Park Service, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community



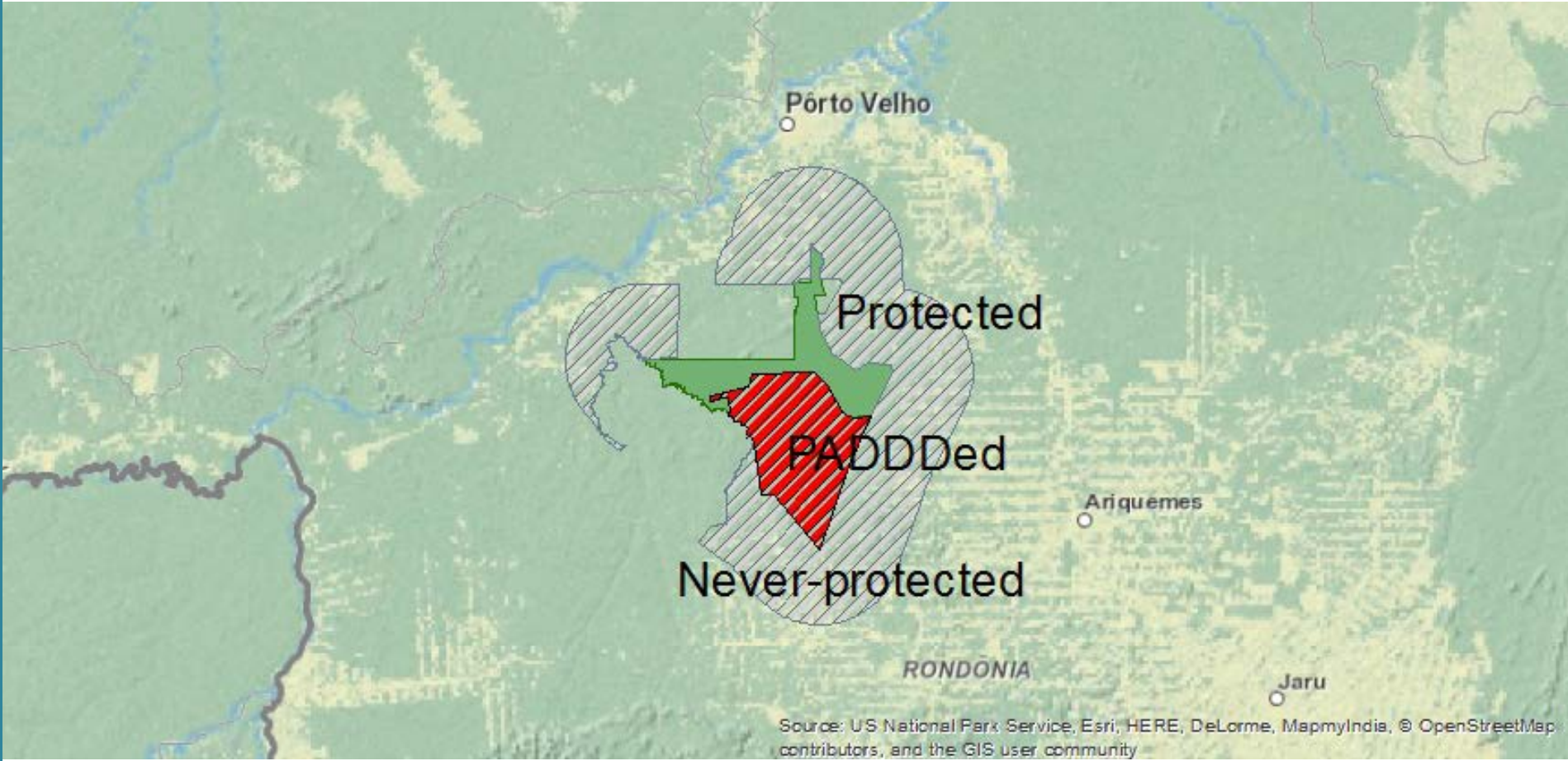
Spatial analysis:



Source: US National Park Service, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap

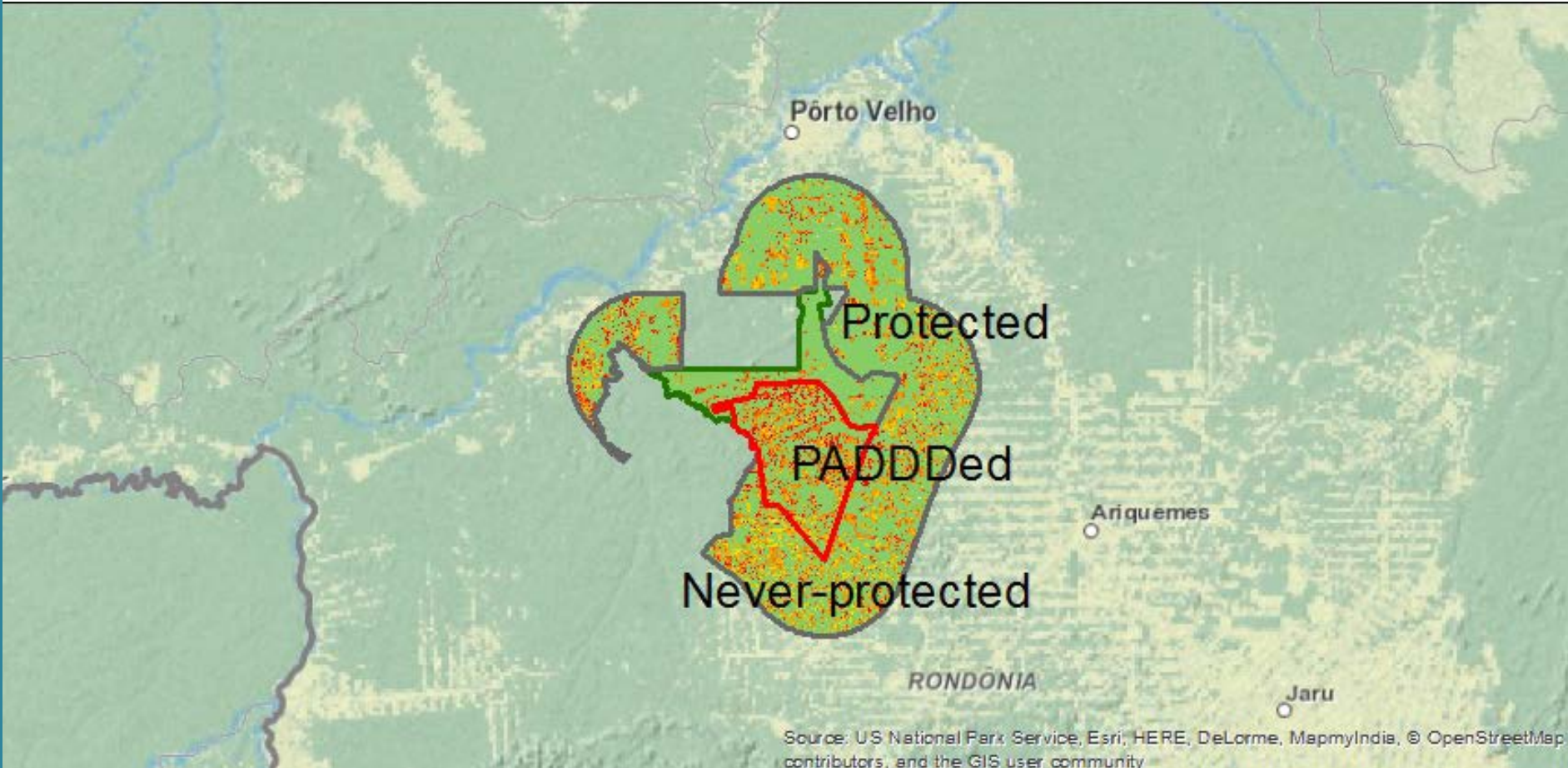


Source: US National Park Service, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community





Deforestation in Bom Futuro



Source: US National Park Service, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Year in which forest loss was primarily detected:





On average, deforestation rates in downsized areas were 144 times greater than rates in their remaining protected areas



All PADDDed areas in Amazon

– *Overall, PADDDed areas were 18.5 times more deforested than protected areas*

...and 2.65 times more than areas that were never protected at all





PADDD significantly increased deforestation rates in Brazilian protected areas

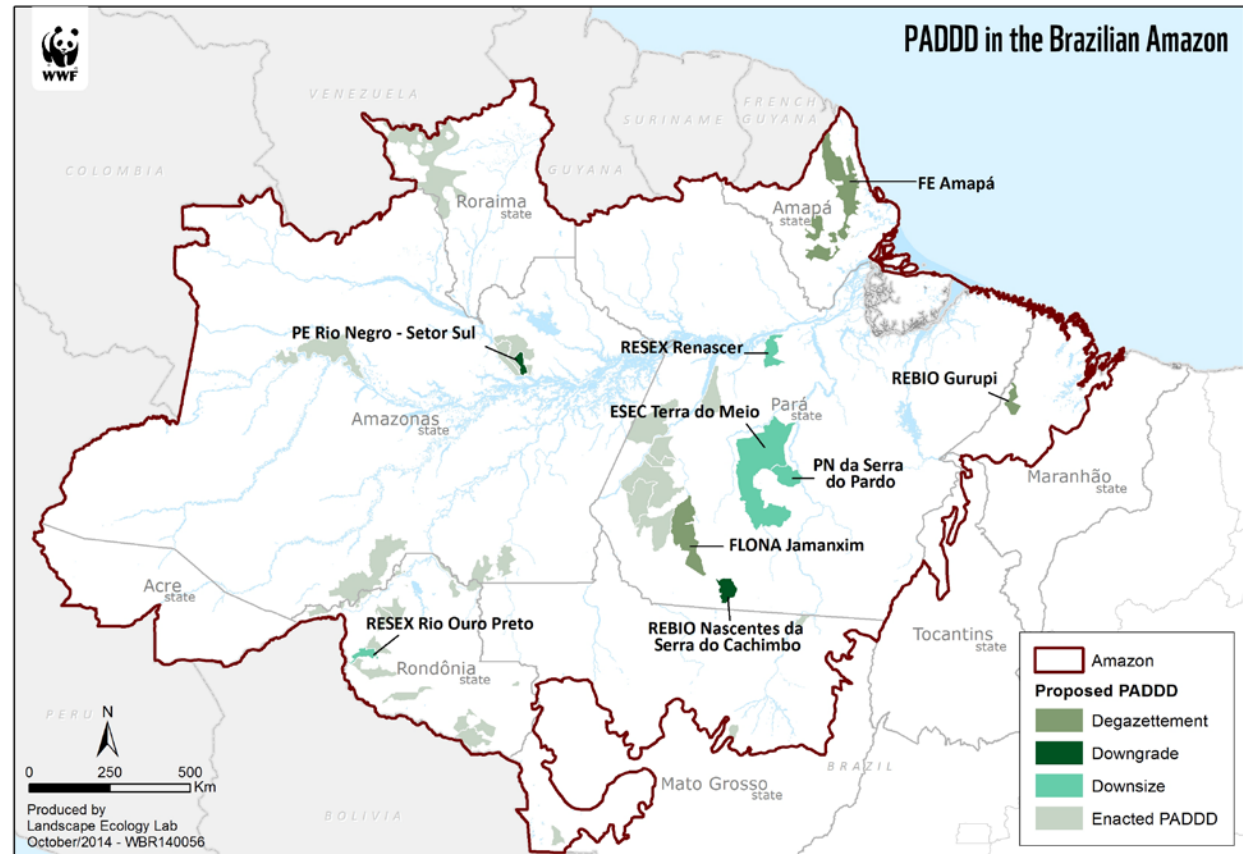




Implications

PADDD undermines political agreements on conservation

- 27 active proposals of PADDD in Brazil
- 1/3 in the Amazon
- May impact 4.5 million hectares
- Draft bill for a new Mining Code may open 10 % of all strict protection areas to mining





Juruena não pode pagar a conta da geração de energia

Like 1 Tweet 0 Email 0 ShareThis New

12 Novembro 2013 | 3 Comments

por WWF-Brasil

O WWF-Brasil vem construindo junto aos setores privado e governamental um método que aponta os locais menos impactantes do ponto de vista socioambiental para a construção de hidrelétricas na Amazônia e outros biomas. Logo, causam grande surpresa as declarações públicas da Empresa de Pesquisa Energética (EPE) sobre a necessidade de se reduzir o Parque Nacional do Juruena (MT/AM) para a construção das usinas de São Simão Alto e Salto Augusto Baixo.

Está claro que o possível sacrifício de um patrimônio de todos os brasileiros foi comunicado unilateralmente pelo setor elétrico, sem um debate amplo e democrático sobre alternativas de locais para os empreendimentos, de fontes variadas para a geração de energia, quanto aos impactos na área protegida e nas comunidades em seu entorno.



© Zig Koch / WWF

Projeto libera mineração em Parques e de quebra muda SNUC

Daniele Bragança - 28/11/13



Estrada ameaça sítio do Patrimônio Natural Mundial

Like 1 Tweet 0 Email 0 ShareThis New

13 Novembro 2013 | 2 Comments

por Aldem Bourscheit, especialista em Políticas Públicas do WWF-Brasil*

Tramita no Congresso Nacional um desabalado projeto de lei que pretende abrir, "na marra", a Estrada do Colono, cortando ao meio o Parque Nacional do Iguaçu. O autor da façanha é um deputado paraense do PT, partido governista, que aposta na iniciativa para turbinar sua reeleição em 2014. A iniciativa, todavia, é pura quimera desenvolvimentista, ameaça a conservação da Mata Atlântica e está baseada em premissas incorretas e distorcidas.



© ICMBIO/Parque Nacional do Iguaçu

Enlarge

O Parque Nacional do Iguaçu fica no oeste do Paraná, foi o primeiro sítio brasileiro reconhecido como Patrimônio Natural Mundial pelas Nações Unidas em 1986, com 4,5 milhões de visitantes por ano.



Recommendations

- PADD needs transparent and binding legal policies
- PADD proposals should require:
 - Technical studies
 - Public consultations
 - Maps & online information





Juruena free from dams: one big win!

- Two power plants were planned to be built inside Juruena National Park
- Reduction of the park and potential flooding of 40,000 ha of PAs
- WWF-Brazil Campaign #SOS Juruena launched in June, 2014
- Online petition with 25,000 signatures
- In November, both dams were excluded from government plans until 2023





Thank you!

